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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/007,215	11/05/2001	Johnny R. Brezina	AUS920010763US1	4015

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EXAMINER

KIM, RICHARD H

ART UNIT

PAPER NUMBER

2882

DATE MAILED: 04/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/007,215

Applicant(s)

BREZINA ET AL. 

Examiner

Richard H Kim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.                      6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention. Specifically, the limitation on page 12, line 6, of a multiple array including at least one laser and at least one photodetector, is not disclosed in the specifications.

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 5-7, 10 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giboney et al. (US 6,318,909 B1).

Referring to claims 1 and 10, Giboney et al. discloses a device comprising die carrier having a generally planar edge (see Fig. 3A, ref. 30); a multiple array lens disposed on the edge of the die carrier (see Fig 2b, ref. 59; col. 11, lines 21-21-25); at least one optical die disposed on the edge of the die carrier (see Fig. 3A, ref. 32); an input/output connector half having a generally planar surface disposed perpendicularly to the edge of the die carrier (see col. 5, lines

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22-27); a connector half having a generally planar surface disposed perpendicularly to the edge of the die carrier (see Fig. 1A, ref. 44), the connector half surface having an input/output connection (see col. 10, lines 24-29); and a circuit cable connected between the optical die and the connection (see col. 10, ref. 9-29; Fig. 1, ref. 26). However, the reference does not explicitly state that the connector is an input/output connector.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ an input/output connector in order to provide two-way connection between optical components, thereby improving the versatility of the device. Further, such a connector is well known in the art to be used as a means for connecting two electro-optical devices.

Referring to claims 5 and 14, Giboney et al. discloses that the optical die comprises a laser (see col. 5, lines 8-11).

Referring to claims 6 and 15, Giboney et al. discloses that the optical die comprises a photodetector (see col. 5, lines 8-11).

Referring to claims 7 and 16, Giboney et al. discloses a device comprising an upper and lower fiber connector portion connected to the die carrier, the upper and lower fiber connector portions being adapted to receive an optical fiber (see Fig. 3a, ref. 52 and 58).

3. Claims 2-4, 8-9, 11-13 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giboney et al. in view of Carden et al. (US 5,202,943).

Referring to claim 19, Giboney et al. discloses a device comprising an optical fiber (see Fig. 1A, ref. 71); a die carrier having a generally planar edge (see Fig. 3A, ref. 30); a multiple

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array lens disposed on the edge of the die carrier see (Fig 2b, ref. 59; col. 11, lines 21-21-25), die including at least one laser and at least one photodetector (see Fig. 5, ref. 5-11); a connector half having a generally planar surface disposed perpendicularly to the edge of the die carrier, the connector half surface having an input/output connection (see col. 10, lines 24-29); a circuit cable connected between the multiple array lens and the connection (see col. 10, ref. 9-29; Fig. 1, ref. 26); and an upper fiber connector portion and a lower fiber connector portion connected to the die carrier, the upper and lower fiber connector portions being adapted to receive an optical fiber (see Fig. 3a, ref. 52 and 58). However, the reference does not explicitly state that the connector is an input/output connector.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ an input/output connector in order to provide two-way connection between optical components, thereby improving the versatility of the device. Further, such a connector is well known in the art to be used as a means for connecting two electro-optical devices.

Furthermore, the reference does not disclose that the *lens array* includes at least one laser and at least one photodetector.

It would have been obvious to one having ordinary in the art to have the lens array since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70. Moreover, Applicant has not disclosed that having lens array including at least one laser and at least one photodetector provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art furthermore, would have

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expected Applicant's invention to perform equally well with either having at least one laser and at least one photodetector included in the lens array or die.

Referring to claims 2-4 and 11-13, Giboney et al. discloses the device previously recited. However, the reference does not disclose that the die carrier comprises ceramic, aluminum nitride or aluminum nitride ceramic.

Carden et al. discloses a die support made of ceramic (see Fig. 7, ref. 27 and col. 5, line 64).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the carrier comprise ceramic, aluminum nitride or aluminum nitride ceramic in order to improve the durability of the device, since ceramics are known in the art to have high resistance to temperature. Further, it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. Moreover, whether the material used is ceramic, aluminum nitride or aluminum nitride ceramic, it is the position of the examiner that the type of material used is not critical to the invention, and therefore would be obvious.

Referring to claims 8 and 17, Giboney et al. disclose the device previously recited. However, the reference does not disclose that the upper fiber connector portion includes at least one fastener accepting hole.

Carden et al. discloses a device wherein the upper fiber connector portion includes at least one fastener accepting hole (see Fig. 1, ref. 127, 131).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the upper fiber connector portion includes at least one fastener

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accepting hole in order to secure the device. According to Carden et al. such a modification "effects securement" (see col. 8, lines 54-55).

Referring to claims 9 and 18, Giboney et al. discloses the device previously recited. However, the reference does not disclose that the lower portion includes at least one fastener accepting hole.

Carden et al. discloses a device wherein the upper fiber connector portion includes at least one fastener accepting hole (see Fig. 1, ref. 127, 131).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the upper fiber connector portion includes at least one fastener accepting hole in order to secure the device. According to Carden et al. such a modification "effects securement" (see col. 8, lines 54-55). Moreover, it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard H Kim whose telephone number is (703)305-4791. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H Kim can be reached on (703)305-3492. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-7722 for regular communications and (703)308-7724 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

Richard H Kim  
Examiner  
Art Unit 2882

RHK  
March 31, 2003

A handwritten signature in cursive script, appearing to read "David Bruce".

**DAVID V. BRUCE**  
**PRIMARY EXAMINER**